

AMENDMENTS TO CLAIMS

1-20. (Canceled)

21. (New) An image processing apparatus which processes image data and outputs the processed image data, comprising:

a maximum/minimum density detecting unit detecting whether a first pixel has a maximum or minimum density among a group of pixels;

a determination unit determining whether the absolute value of a difference between the average density of pairs of pixels and the density of the first pixel is larger than a predetermined threshold value, wherein said pairs of pixels are within said group of pixels, and wherein said first pixel is located between the pixels of said pairs of pixels;

a peak pixel detecting unit detecting a peak pixel when said first pixel has a maximum or minimum density among said group of pixels and the absolute value of the difference between the average density of said pairs of pixels and the density of the first pixel is larger than the predetermined threshold value; and

a dot region detecting unit for detecting a dot region based on a relationship between the number of peak pixels in a two-dimensional target region and the number of peak pixels in two-dimensional neighboring regions of the target region.

22. (New) An image processing apparatus which processes image data and outputs the processed image data, comprising:

a determination unit determining whether the absolute value of a difference between the average density of pairs of pixels at positions symmetrical with respect to a

center pixel and the density of the center pixel is larger than a predetermined threshold value;

a peak pixel detection unit detecting a peak pixel when the center pixel has a maximum or minimum density among a group of pixels, and the absolute value of the difference between the average density of the pairs of pixels and the density of the center pixel is larger than the predetermined threshold;

a dot region detecting unit detecting a dot region based on a relationship between the number of peak pixels in a two-dimensional target region and the number of peak pixels in two-dimensional neighboring regions of the target region;

a low-linear-density dot region detecting unit detecting a low-linear-density dot region based on the relationship of the number of peak pixels between the target region and each neighboring region; and

an image processing switching unit for switching processing in response to outputs from said detecting units.

23. (New) The image processing apparatus of claim 22 wherein the image processing switching unit includes a first filter for image processing of a dot region and a second filter for image processing of a low-linear-density dot region, the second filter having smoothing coefficients larger than smoothing coefficients of the first filter.

24. (New) The image processing apparatus of claim 22, wherein the determination unit responds to densities of a center group of adjacent pixels surrounding the center pixel and densities of a circumferential group of pairs of circumferential pixels at positions symmetrical with respect to the center pixel.

25. (New) The image processing apparatus of claim 24, wherein the pixels of the circumferential group are chosen according to a ratio of copy expansion or reduction which is specified by a document scanning speed.

26. (New) An image forming apparatus, comprising: the image processing apparatus of claim 21; and an image output device printing an image based on image data processed by the image processing apparatus.

27. (New) The image forming apparatus of claim 26 further comprising a control unit which analyzes an externally supplied print command and controls the image output device to perform the printing of the image based on the processed image data in accordance with the print command.

28. (New) A color copier, comprising: the image processing apparatus of claim 21; an image reading device reading image data from a document by color separation and supplying the image data to the image processing apparatus; and an image printing device forming a reconstructed image based on processed image data output by the image processing apparatus and printing the reconstructed image.